Methods: Reviewing available literature providing evidence for the new technologies available for treating:

1- Chronic Venous Disease (including superficial varicose veins and deep venous obstructions).
2- Deep Vein thrombosis (DVT).

Results: RCTs showed that ultrasound-guided endovenous thermal or chemical ablation of superficial varicose veins are as effective as surgical ligation and stripping with the additional advantages of being minimally invasive, with less complications and more patient satisfaction, potential treatment in out-patient setup and early return to work. Stenting of chronic deep venous obstruction is safe, effective in improving symptoms and treating venous leg ulcers. Catheter-directed thrombolysis and pharmaco-mechanical thrombolysis are both effective in treating acute DVT and reducing post-thrombotic manifestations.
Conclusion: Current evidence shows that management of venous diseases is now shifting towards minimally invasive interventions with very promising results. Given the lots of research work done in the field nowadays and evolving technologies provided by manufacturers, it will soon be the standard of practice offered for patients with chronic venous disease.

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The relation between silent ischemia and coronary artery disease severity in diabetics

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Purpose: The aim of this work was to examine the relation between the severity of silent ischemic episodes detected by ambulatory ECG recording and the angiographic severity of coronary artery disease (CAD).
Methods: Fifty patients with chronic stable angina pectoris and type 2 diabetes mellitus were enrolled in the study.Among the study group, there were 33 males and 17 females; and their mean age was 61 ± 6.5 years. All patients were submitted to 24-hours ambulatory ECG recording and coronary angiography with estimation of Gensini score. According to the frequency of silent ST-segment depression episodes, patients were classified into two groups.

Group I: 24 patients with ST-segment depression frequency <8.
Group II: 26 patients with ST-segment depression frequency $\geqslant 8$.

Results: In patients with ST-segment depression frequency $\geqslant 8$, there were significantly higher number of left main coronary artery (LMCA) disease, and significantly higher Gensini score (Table 1). Sensitivity of ST-segment depression frequency $\geqslant 8$ in predicting Gensini score $\geqslant 20$ was 60%, specificity was 56%, positive predictive value was 58%, negative predictive value was 58%, and overall accuracy was 58% (Kappa $= 0.412, p = 0.014$). Gensini score showed significant positive correlation with ST-segment depression frequency ($r = 0.391, p = 0.005$), with maximum ST-segment depression ($r = 0.346, p = 0.014$), and with total ST-segment depression duration ($r = 0.495, p = 0.0003$).
Conclusion: Patients with type 2 diabetes mellitus who had more frequent silent myocardial ischemia by ambulatory ECG recording were found to have angiographically more extensive CAD as assessed by Gensini score. Gensini score was found to be significantly correlated to the frequency of silent ST-depression, maximum ST-depression, and total ST-depression duration.

See Table 1.

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The trace elements in congenital cyanotic heart disease

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Background: The trace elements are essential micronutrients that have important physiological, metabolic, and homeostatic roles in the human being. Up till now the actually role and effect of the trace elements on myocardial metabolism specifically on congenital cyanotic heart disease is not entirely clear.
Objective: This study aimed to detect the serum level of selected trace elements (zinc, copper and selenium), and evaluate its effect and relation in congenital cyanotic heart disease.
Methodology: This study had enrolled upon 50 children, included 30 patients with congenital cyanotic heart disease and 20 age matched normal healthy children as control group. All groups were subjected to thorough clinical history, examination and specific cardiac investigation as well as detection of serum levels of zinc, copper and selenium. All results were statistical analyzed.
Results: The current study revealed that a highly significant decrease in the serum level of both zinc and selenium ($p < 0.00$l and $p < 0.01$), however serum copper level has non significant increase in congenial cyanotic heart disease, were ($p > 0.95$). There was non significant correlation between the mean serum levels of trace elements and the hemodynamic parameters,. Also there were non significant correlations between the age and sex of the studied group and the mean serum levels of these trace elements ($p > 0.05$).
Conclusion: Congenital cyanotic heart disease were associated with a highly significant decrease in the mean serum selenium and zinc levels, when compared with control group and non significant increase the mean serum copper levels. Changes in these trace elements suggested to play an important role in the pathogenesis of myocardial damage in congenital cyanotic heart disease.

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Three-dimensional speckle tracking echocardiography for left atrial and left ventricular function in hypertrophic cardiomyopathy mutation carriers

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